

**WHAT IS CLAIMED IS:**

1           1. For use in a telecommunications system having a source base station and a  
2 destination base station where a specified mobile station establishes a connection with  
3 the source base station, a method comprising:

4           determining a dynamic offset threshold for starting at least a portion of a soft  
5 handover sequence for the specified mobile station at the destination base station, the  
6 dynamic offset threshold being a function of a probability that the specified mobile  
7 station will engage in soft handover;

8           initiating the at least a portion of the soft handover sequence when a signal  
9 strength from the destination base station as received at the specified mobile station has  
10 a predetermined relationship to the dynamic offset threshold.

1           2. The method of claim 1, further comprising initiating another portion of the  
2 soft handover sequence when the signal strength from the destination base station as  
3 received at the specified mobile station has a predetermined relationship to a fixed  
4 offset threshold.

1           3. The method of claim 2, wherein the another portion of the soft handover  
2 sequence is a remainder of the soft handover sequence.

1           4. The method of claim 1, wherein the probability is a function of signal  
2 strength of the destination base station as received at the specified mobile station.

1           5. The method of claim 1, wherein the probability is a function of signal  
2 strength of the destination base station as received at the specified mobile station and a  
3 function of signal strength of the source base station as received at the specified mobile  
4 station.

1           6. The method of claim 1, wherein the probability is a statistical probability  
2 based on handover history of other mobile stations.

1           7. The method of claim 1, further comprising initiating the at least a portion of  
2 the soft handover sequence when a signal strength from the destination base station as  
3 received at the specified mobile station is not less than the dynamic offset threshold, the

4 dynamic offset threshold being a difference between the signal strength of the source  
5 base station as received at the specified mobile station and a dynamic offset.

1 8. The method of claim 7, wherein the dynamic offset is a function of a fixed  
2 offset and the probability of the specified mobile station fulfilling the handover criteria.

1 9. The method of claim 1, further comprising determining the dynamic offset  
2 threshold at a control node of the code division multiple access communication system.

1 10. The method of claim 9, further comprising the specified mobile station  
2 sending to the control node a measurement report of the signal strength of the  
3 destination base station as received at the specified mobile station.

1 11. A telecommunications system comprising:  
2 a source base station;  
3 a destination base station;  
4 a dynamic offset threshold determination unit which determines a dynamic offset  
5 threshold for starting at least a portion of a soft handover sequence for the specified  
6 mobile station at the destination base station, the dynamic offset threshold being a  
7 function of a probability that the specified mobile station will engage in soft handover.

1 12. The apparatus of claim 11, wherein the dynamic offset threshold  
2 determination unit initiates the at least a portion of the soft handover sequence when a  
3 signal strength from the destination base station as received at the specified mobile  
4 station has a predetermined relationship to the dynamic offset threshold.

1 13. The apparatus of claim 11, further comprising a handover unit which  
2 initiates another portion of the soft handover sequence when the signal strength from  
3 the destination base station as received at the specified mobile station has a  
4 predetermined relationship to a fixed offset threshold.

1 14. The apparatus of claim 13, wherein the another portion of the soft handover  
2 sequence is a remainder of the soft handover sequence.

1           15. The apparatus of claim 11, wherein the probability is a function of signal  
2 strength of the destination base station as received at the specified mobile station.

1           16. The apparatus of claim 11, wherein the probability is a function of signal  
2 strength of the destination base station as received at the specified mobile station and a  
3 function of signal strength of the source base station as received at the specified mobile  
4 station.

1           17. The apparatus of claim 11, wherein the probability is a statistical  
2 probability based on handover history of other mobile stations.

1           18. The apparatus of claim 11, wherein the dynamic offset threshold  
2 determination unit initiates the at least a portion of the soft handover sequence when a  
3 signal strength from the destination base station as received at the specified mobile  
4 station is not less than the dynamic offset threshold, the dynamic offset threshold being  
5 a difference between the signal strength of the source base station as received at the  
6 specified mobile station and a dynamic offset.

1           19. The apparatus of claim 18, wherein the dynamic offset is a function of a  
2 fixed offset and the probability of the specified mobile station fulfilling the handover  
3 criteria.

1           20. The apparatus of claim 11, wherein the dynamic offset threshold  
2 determination unit is situated at a control node of the code division multiple access  
3 communication system.

1           21. The apparatus of claim 20, wherein control node receives from the specified  
2 mobile station a measurement report of the signal strength of the destination base  
3 station as received at the specified mobile station.